103D CONGRESS 2D SESSION

## H. R. 4799

To promote the research and development of environmental technologies.

#### IN THE HOUSE OF REPRESENTATIVES

July 20, 1994

Mr. Brown of California introduced the following bill; which was referred to the Committee on Science, Space, and Technology

## A BILL

To promote the research and development of environmental technologies.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

### 3 TITLE I—GENERAL PROVISIONS

- 4 SEC. 101. SHORT TITLE; TABLE OF CONTENTS.
- 5 (a) Short Title.—This Act may be cited as the
- 6 "Environmental Technologies Act of 1994".
- 7 (b) Table of Contents.—The table of contents for
- 8 this Act is as follows:

#### TITLE I—GENERAL PROVISIONS

Sec. 101. Short title; table of contents.

Sec. 102. Findings.

Sec. 103. Purposes.

Sec. 104. Definitions.

#### TITLE II—POLICY COORDINATION AND TECHNOLOGY PROGRAMS

#### Subtitle A—Policy Coordination and Program Planning

- Sec. 201. Coordination of environmental technology research and development.
- Sec. 202. Life-cycle assessments.
- Sec. 203. Environmental technologies in ongoing programs.

#### Subtitle B—Environmental Technology Innovation Initiative

- Sec. 211. Establishment and administration of initiative.
- Sec. 212. Innovative environmental technology program.
- Sec. 213. President's total environmental quality award and the national environmentally sound technology award.
- Sec. 214. Incorporation of information on environmental technologies into existing networks.
- Sec. 215. Use of Federal facilities for environmental technology demonstration.
- Sec. 216. Study of factors affecting innovation in environmental technologies.
- Sec. 217. Disclaimer.

#### Subtitle C—Other Research Activities

Sec. 221. Environmentally advanced engineering research.

#### TITLE III—PERFORMANCE MEASUREMENTS

- Sec. 301. Performance measurements.
- Sec. 302. Verification of environmental technologies.
- Sec. 303. Use of certain environmental technologies by the Federal government.

## TITLE IV—DEPARTMENT OF ENERGY ENVIRONMENTAL TECHNOLOGY DEVELOPMENT

- Sec. 401. Environmental restoration and waste management technology development.
- Sec. 402. Metals recycling demonstration program.
- Sec. 403. Funding and authorization.
- Sec. 404. Coordination.

#### TITLE V—AUTHORIZATION OF APPROPRIATIONS

- Sec. 501. Authorization of appropriations.
- Sec. 502. Limitation on appropriations.
- Sec. 503. Competition requirement for awards of financial assistance.

#### 1 SEC. 102. FINDINGS.

- 2 The Congress finds the following:
- 3 (1) Promoting a sound economy and maintain-
- 4 ing a healthy environment are among the urgent
- 5 public policy challenges of the United States.

- 1 (2) The research, development, and demonstra-2 tion of environmental technologies will enhance the 3 economic standing of the United States and global 4 environmental security.
  - (3) Although better designs for products and processes offer new opportunities for substantially improved environmental performance in growing domestic and international markets, current government regulations and market barriers do not allow these opportunities to be fully exploited.
  - (4) Although the Federal Government, research institutes, universities, and industries are conducting substantial basic environmental research and development, environmental concerns must become a more pervasive and central dimension of technology research and development.
  - (5) The coordination of Federal, State, and local activities for the research, development, and demonstration of environmental technologies will greatly enhance the effectiveness of environmental policies of the United States.

#### **SEC. 103. PURPOSES.**

- 23 It is the purpose of this Act—
- 24 (1) to improve, consistent with applicable provi-25 sions of law, coordination and integration of environ-

mental technology research and development per-1 2 formed by and across Federal agencies; (2) to assist and catalyze efforts of private in-3 dustry, universities, nonprofit research centers, and Federal laboratories in the research, development, 6 and demonstration of cost-effective, energy-efficient, 7 and safe environmental technologies and, in the process, to promote the competitiveness of United 8 9 States companies; 10 (3) to facilitate the dissemination of informa-11 tion regarding innovations in environmental technologies; 12 (4) to promote the development of technical 13 performance measurements of environmentally sound 14 15 products; and (5) to direct the study of policy changes that 16 17 will provide for the more efficient research, development, and demonstration of environmental tech-18 19 nologies. 20 SEC. 104. DEFINITIONS. 21 For the purposes of this Act: (1) The term "Administrator" means the Ad-22 ministrator of the Environmental Protection Agency. 23

(2) The term "design-for-environment" means

the process of synthesis in which waste prevention

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- and the efficient management of materials during a product's life cycle are treated as design objectives, in addition to conventional attributes such as cost, performance, manufacturability, and safety.
  - (3) The term "environmental technology" means a cost-efficient technology that is primarily intended to improve the quality of the environment through pollution prevention, pollution monitoring, pollution control, pollution remediation, reuse, recycling, or disposal, or that is capable of cost-effectively offering significant environmental benefits when compared with a technology it replaces.
  - (4) The term "Federal laboratory" has the meaning given the term "laboratory" in section 12(d)(2) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(d)(2)).
  - (5) The term "life-cycle assessment" means an inventory of the resource use and waste generation involved in developing a technology, including materials extraction, materials conversion, transportation, energy use, end use, recycling, and disposal, and their associated costs and environmental impacts.
  - (6) The term "small business concern" means a United States company that is a small business

- concern within the meaning given such term in the Small Business Act (15 U.S.C 631 et seq.).
- (7) The term "sustainable economic development" means the integration of environmental and economic development concerns leading to continuous and long-term economic development with reduced pollution and the more efficient use of energy and materials.
- 9 (8) The term "technology" means a product, a 10 manufacturing process, a system, a service, or any 11 other method by which individual or societal needs 12 are met through technical activities.

## 13 TITLE II—POLICY COORDINA-

## 14 TION AND TECHNOLOGY PRO-

## 15 **GRAMS**

## Subtitle A—Policy Coordination and Program Planning

- 18 SEC. 201. COORDINATION OF ENVIRONMENTAL TECH-
- 19 **NOLOGY RESEARCH AND DEVELOPMENT.**
- 20 (a) Interagency Coordination.—The President,
- 21 acting through the Director of the Office of Science and
- 22 Technology Policy or other entity designated by the Presi-
- 23 dent and in coordination with the heads of other Federal
- 24 agencies that have substantial capabilities in the research,
- 25 development, and demonstration of environmental tech-

- 7 nologies, shall develop an interagency strategy that is in accordance with the policies, requirements, and objectives of the applicable Federal statutes administered by those 3 4 agencies and that— 5 (1) ensures, to the maximum extent practicable, 6 the coordinated, interagency promotion of the re-7 search, development, and demonstration of environmental technologies; and 8 (2) develops priorities for Federal environ-9 mental technology research, development, and dem-10 onstration efforts, by using scientifically objective in-11 12 formation, data, and assessments of risk. (b) IMPLEMENTATION.—In carrying out this section, 13 the President, acting through the Director of the Office 14 15 of Science and Technology Policy or other entity des-
  - (1) review current Federally funded programs, including Federal budget outlays for these programs, to determine their role in the research, development, and demonstration of environmental technologies;

ignated by the President, shall—

- (2) recommend the specific responsibilities of each appropriate Federal agency to achieve the priorities developed under this section;
- 24 (3) describe the recommended levels of Federal 25 funding required for each Federal agency to carry

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- out the specific responsibilities recommended in paragraph (2);
  - (4) develop a means for ensuring, to the maximum extent practicable, that the principles of sustainable economic development are integrated into the research, development, and technology programs of all Federal agencies;
    - (5) ensure that programs and activities established under this Act are fully coordinated with existing Federal capabilities and an overall Federal strategy for the research, development, and demonstration of environmental technologies;
    - (6) ensure that the efforts of the Federal Government are coordinated with the efforts of State and local governments and private and nonprofit organizations promoting the research, development, and demonstration of environmental technologies;
    - (7) ensure that programs and activities established under this Act develop technologies that could assist States and regional associations of States to comply with existing environmental regulations, including air pollution regulations; and
    - (8) submit to the Congress any recommendations regarding legislative or administrative action, including recommendations on the roles of Federal

- agencies, which may be required to carry out this
- 2 section.
- 3 (c) BUDGET COORDINATION.—The Director of the
- 4 Office of Science and Technology Policy shall annually as-
- 5 sess, in conjunction with other entities designated by the
- 6 President and before the President submits to the Con-
- 7 gress the budget for a fiscal year, the budget estimate of
- 8 each relevant Federal agency for consistency with the
- 9 plans, reviews, and priorities developed under this section.
- 10 The Director shall make the results of the annual assess-
- 11 ment available to the appropriate elements of the Execu-
- 12 tive Office of the President, particularly the Office of Man-
- 13 agement and Budget, for use in the preparation of such
- 14 budget.
- 15 (d) STRATEGIC PLAN AND ANNUAL REVIEW.—The
- 16 Director of the Office of Science and Technology Policy
- 17 or other entity designated by the President shall submit
- 18 to the Congress—
- 19 (1) within one year after the date of the enact-
- 20 ment of this Act and periodically thereafter, a report
- on the strategy referred to in subsection (a) and any
- revisions to the strategy for executing interagency
- coordination of programs and activities conducted
- under this section, including the timely research, de-

- velopment, and demonstration of innovative environmental control and remediation technologies; and
- 3 (2) annually a report that describes the 4 progress made in implementing the strategy, includ-5 ing the programs and activities conducted under this 6 Act, and the amendments made by this Act, in 7 achieving the purposes of this Act.
- 8 (e) Non-Federal Participation.—The Director of
  9 the Office of Science and Technology Policy shall establish
  10 mechanisms to ensure the participation of non-Federal en11 tities, including State and local governments, United
  12 States companies, United States industrial associations
  13 and consortia, United States institutions of higher edu14 cation, United States worker organizations, United States
  15 professional associations, and United States nonprofit or16 ganizations, in carrying out this section, including the de17 velopment of the plans, reviews, and recommendations de-

#### 19 SEC. 202. LIFE-CYCLE ASSESSMENTS.

veloped under this section.

- 20 (a) FINDINGS.—The Congress finds the following:
- 21 (1) Consideration of life-cycle consequences of 22 the development of a technology can greatly assist in 23 the achievement of more environmentally sound 24 products, processes, and services and enhanced in-25 dustrial efficiency. Life-cycle assessments and other

- design-for-environment resources can facilitate this achievement by clarifying materials flows and energy flows and by enhancing capabilities to assess these flows in the design of such products, processes, and services.
  - (2) Methods of life-cycle assessment and other design-for-environment resources are underused in both the public and private sectors, particularly as applied to sustainable economic development.
  - (3) The data necessary for meaningful life-cycle assessment and other design-for-environment resources are often difficult to acquire, and no system exists to make such data readily available to public and private groups.

### (b) LIFE-CYCLE ASSESSMENT COORDINATION.—

(1) In GENERAL.—As part of, and consistent with, the overall Federal environmental technology strategy established in section 201, the Director of the Office of Science and Technology Policy or other entity designated by the President shall, in collaboration with the heads of other appropriate Federal agencies (including the Secretary of Commerce, the Secretary of Energy, and the Secretary of Defense), coordinate Federal activities and resources that are applied to life-cycle assessment and other design-for-

- environment resources in order to maximize the contribution of life-cycle assessments and other design-for-environment resources to the efficient design, development, and use of technologies, and to sustainable economic development.
  - (2) Implementation.—In carrying out this subsection, the Director of the Office of Science and Technology Policy or other entity designated by the President shall—
    - (A) ensure that the life-cycle assessment and other design-for-environment resources of each Federal agency are developed and disseminated in a coordinated fashion, partitioning agency responsibilities where appropriate;
    - (B) coordinate with State and local governments developing life-cycle assessment and other design-for-environment resources; and
    - (C) consult with industry, professional, nonprofit, and other appropriate private-sector organizations to take into account the life-cycle assessment and other design-for-environment capabilities of the private sector in carrying out this section.
  - (3) OTHER ACTIVITIES.—In carrying out this subsection, the Director of the Office of Science and

- Technology Policy or other entity designated by the
  President shall also encourage appropriate Federal
  agencies—
  - (A) to collect and disseminate information regarding analytic methods (and, as required, to develop such methods) that will significantly enhance the ability of United States companies and other organizations to evaluate materials extraction, materials conversion, transportation, energy use, end use, recycling, and disposal, and their associated costs and environmental impacts;
  - (B) to utilize, to the fullest extent practicable, existing networks and supporting databases which provide access to publicly available information that will facilitate the use of life-cycle assessments and other design-for-environment resources;
  - (C) to sponsor demonstrations for public policy and business decisionmakers of the effective use of life-cycle assessment and other design-for-environment data and methods described in this section; and
  - (D) to ensure that private-sector life-cycle assessment and other design-for-environment

1	capabilities are, and continue to be, fully inte-
2	grated into activities under this section.
3	(4) Limitation.—Nothing in this section shall be
4	considered to require the use of life-cycle assessment or
5	other design-for-environment data or methods by any Fed-
6	eral agency.
7	(c) Annual Review.—The Director of the Office of
8	Science and Technology Policy or other entity designated
9	by the President shall annually submit to the Congress
10	a report containing an evaluation of the life-cycle assess-
11	ment or other design-for-environment activities of the
12	Federal Government.
13	SEC. 203. ENVIRONMENTAL TECHNOLOGIES IN ONGOING
13 14	SEC. 203. ENVIRONMENTAL TECHNOLOGIES IN ONGOING PROGRAMS.
14	PROGRAMS.
14 15 16	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Ste-
14 15 16	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15)
14 15 16 17	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701) is amended—
14 15 16 17	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701) is amended—  (1) in section 2(2), by inserting "greater envi-
114 115 116 117 118	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701) is amended—  (1) in section 2(2), by inserting "greater environmental sustainability," after "employment oppor-
114 115 116 117 118 119 220	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701) is amended—  (1) in section 2(2), by inserting "greater environmental sustainability," after "employment opportunities,";
14 15 16 17 18 19 20 21	PROGRAMS.  (a) STEVENSON-WYDLER AMENDMENTS.—The Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701) is amended—  (1) in section 2(2), by inserting "greater environmental sustainability," after "employment opportunities,";  (2) in section 3(1), by inserting "for sustainable"

- "(14) 'Sustainable economic development'
  means the integration of environmental and economic development concerns leading to continuous
  and long-term economic development with reduced
  pollution and the more efficient use of energy and
  materials.";
  - (4) in section 6(a), by inserting "and sustainable economic development in their regions" after "enhance the competitiveness of American business";
  - (5) in section 6(d), by inserting "and sustainable economic development in their regions" after "enhance the competitiveness of American businesses";
  - (6) in section 7(a), by inserting "and sustainable economic development" after "enhance technological innovation";
  - (7) in section 7(c)(1), by inserting "sustainable economic development," after "employment,";
  - (8) in section 9(a), by inserting "and sustainable economic development" after "enhance technological innovation"; and
  - (9) in section 11(c)(1), by inserting "and would enhance sustainable economic development" after "commercial applications".

(b) NIST AMENDMENTS.—The National Institute of 1 Standards and Technology Act (15 U.S.C. 271) is amend-3 ed— (1) in section 1(b)(1), by inserting "sustainable" 4 economic development," after "improved product re-5 liability and manufacturing processes,"; 6 (2) in section 1, by adding after subsection (b) 7 the following new subsection: 8 "(c) For purposes of this section, the term 'sustain-9 able economic development' means the integration of envi-10 ronmental and economic development concerns leading to 11 continuous and long-term economic development with re-12 duced pollution and the more efficient use of energy and materials."; and 14 15 (3) in section 2(b)(1), by inserting "to enhance" sustainable economic development (as that term is 16 17 defined in section 1(c))," after "to improve quality,". 18 19 (c) TECHNICAL AMENDMENT.—Section 214 of the National Aeronautics and Space Administration Author-20 21 ization Act, Fiscal Year 1989 (42 U.S.C. 2451 note) is 22 amended— "102(c)" striking 23 (1) by and inserting "102(d)"; and 24

1	(2) by striking "2451(c)" and inserting
2	"2451(d)".
3	(d) NASA AMENDMENTS.—The National Aero-
4	nautics and Space Act of 1958 (42 U.S.C. 2451 note) is
5	amended—
6	(1) in section 102(d)—
7	(A) by redesignating paragraphs (6), (7),
8	(8), and (9) as paragraphs (7), (8), (9), and
9	(10), respectively; and
10	(B) by inserting after paragraph (5) the
11	following new paragraph:
12	"(6) The making available to Federal and non-
13	Federal entities of the United States, technologies
14	that will enhance the sustainable economic develop-
15	ment of the Nation."; and
16	(2) in section 103—
17	(A) by striking "; and" in paragraph (1)
18	and inserting a semicolon;
19	(B) by striking the period at the end of
20	paragraph (2) and inserting "; and; and
21	(C) by adding at the end the following new
22	paragraph:
23	"(3) the term 'sustainable economic develop-
24	ment' means the integration of environmental and
25	economic development concerns leading to continu-

1	ous and long-term economic development with re-
2	duced pollution and the more efficient use of energy
3	and materials.".
4	(e) NSF AMENDMENTS.—
5	(1) Functions.—Section 3(a) of the National
6	Science Foundation Act of 1950 (42 U.S.C. 1861 et
7	seq.) is amended—
8	(A) in paragraph (6), by striking "; and"
9	and inserting a semicolon;
10	(B) in paragraph (7), by striking the pe-
11	riod and inserting "; and; and
12	(C) by adding at the end the following new
13	paragraph:
14	"(8) to foster education and research that
15	would promote sustainable economic development
16	nationally and internationally.".
17	(2) Definition.—Subsection (g) of section 14
18	of such Act is amended as follows:
19	(A) By striking "(g) For purposes of this
20	Act, the term" and inserting the following:
21	"(g) For purposes of this Act:
22	"(1) The term".
23	(B) By adding after paragraph (1), as des-
24	ignated by subparagraph (A) of this paragraph,
25	the following new paragraph:

"(2) The term 'sustainable economic development' means the integration of environmental and economic development concerns leading to continuous and long-term economic development with reduced pollution and the more efficient use of energy and materials."

# Subtitle B—Environmental Technology Innovation Initiative

9 SEC. 211. ESTABLISHMENT AND ADMINISTRATION OF INI-

10 TIATIVE.

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11 (a) ESTABLISHMENT.—There is established an inter12 agency Environmental Technologies Innovation Initiative,
13 to be implemented as part of, and consistent with, the
14 overall Federal environmental technology strategy estab15 lished in section 201, to promote the research, develop16 ment, and demonstration of technologies that will contrib17 ute significantly to sustainable economic development. The
18 Administrator shall administer the initiative in collabora19 tion with the heads of other Federal agencies, including
20 the Secretary of Commerce, the Secretary of Energy, the
21 Secretary of Defense, the Director of the National Science
22 Foundation, the Secretary of Agriculture, and the Sec23 retary of Interior, that have substantial capabilities in ad24 vanced technology research and development.

1	(b) Conduct of Initiative Programs and Activi-
2	TIES.—The initiative referred to in subsection (a) shall in-
3	clude—
4	(1) the administration and award of the Presi-
5	dent's Total Environmental Quality Award estab-
6	lished under section 24 of the Stevenson-Wydler
7	Technology Innovation Act of 1980 (15 U.S.C. 3701
8	et seq.), as added by section 213, and of the Na-
9	tional Environmentally Sound Technology Award es-
10	tablished under section 25 of such Act, as added by
11	section 213;
12	(2) the conduct of the Innovative Environ-
13	mental Technology Program described in section
14	212, the information activities described in section
15	214, and the environmental technology demonstra-
16	tion program described in section 215; and
17	(3) the study provided for in section 216.
18	(c) AGREEMENTS WITH OTHER AGENCIES; ASSIST-
19	ANCE.—
20	(1) In general.—To carry out a section re-
21	ferred to in subsection $(b)(2)$ , the Administrator
22	may enter into an agreement with the head of an-
23	other Federal agency, and enter into contracts and
24	cooperative agreements with, and award grants to,

- entities eligible for financial assistance under that section.
- (2) Competitive process.—The Administrator (or the head of a Federal agency under an agreement under paragraph (1)) shall select proposals for financial assistance under a section referred to in subsection (b)(2) solely through a competitive, merit-based evaluation process.
- 9 (3) Integration of industry and other 10 VIEWS.—The Administrator (or the head of a Fed-11 eral agency under an agreement under paragraph 12 (1)) shall develop mechanisms for integrating the views of representatives of industry and nonprofit 13 14 and other appropriate organizations into the process by which proposals for financial assistance under a 15 section referred to in subsection (b)(2) are evaluated 16 17 and selected.
- (d) OTHER ASSISTANCE AUTHORIZED.—The Administrator, in collaboration with the heads of other appropriate Federal agencies that have substantial capabilities in advanced technology research and development and as appropriate, may provide an entity receiving financial assistance under a section referred to in subsection (b)(2) with any technical and other assistance, including any equipment and facilities of Federal laboratories (including

- 1 the scientists and engineers at those laboratories), nec-
- 2 essary to carry out such section.
- 3 (e) Annual Interagency Plan and Review.—
- 4 The Administrator, in collaboration with the heads of
- 5 other appropriate Federal agencies (including the Sec-
- 6 retary of Commerce and the Secretary of Energy) and in
- 7 consultation with representatives of industry, nonprofit,
- 8 and other appropriate organizations, shall develop a stra-
- 9 tegic plan for the programs and activities referred to in
- 10 subsection (b)(2) as part of, and consistent with, the over-
- 11 all Federal environmental technology strategy established
- 12 in section 201 and shall report to the Congress on the
- 13 performance of such programs and activities as part of
- 14 the annual report described in section 201(d). Such report
- 15 shall include an evaluation of—
- 16 (1) the success of innovations resulting from 17 such programs and activities; and
- 18 (2) the nature and extent of participation of so-
- 19 cially disadvantaged individuals and economically
- disadvantaged individuals, as such terms are defined
- in paragraphs (6)(A) and (5) of section 8(a) of the
- Small Business Act (15 U.S.C. 637(a)(6)(A),(5)),
- respectively, including women, including an evalua-
- 24 tion of any steps taken to encourage the participa-
- 25 tion of such individuals.

1	(f) Administration.—
2	(1) IN GENERAL.—In administering the pro-
3	grams and activities referred to in subsection (b)(2)
4	the Administrator shall—
5	(A) monitor the manner in which any tech-
6	nologies developed as a result of the programs
7	and activities are used, and report periodically
8	to the Congress on the extent of any inter-
9	national transfer of these technologies;
10	(B) provide for appropriate dissemination
11	of the results of any research conducted under
12	such program and activities; and
13	(C) take any other action the Adminis-
14	trator considers necessary to carry out the pro-
15	grams and activities and to avoid unnecessary
16	duplication of effort by Federal agencies.
17	(2) Applicability of other law.—Para-
18	graphs (5), (6), (7), (8), and (11) of section 28(d)
19	of the National Institute of Standards and Tech-
20	nology Act (15 U.S.C. 278n(d)) shall apply to the
21	administration of the programs and activities re-
22	ferred to in subsection (b)(2).
23	(3) Participation of socially and eco-
24	NOMICALLY DISADVANTAGED INDIVIDUALS.—In car-

rying out the sections referred to in subsection

- (b)(2), the Administrator shall encourage the par-
- 2 ticipation of socially disadvantaged individuals and
- 3 economically disadvantaged individuals, as such
- 4 terms are defined in paragraphs (6)(A) and (5) of
- 5 section 8(a) of the Small Business Act (15 U.S.C.
- 6 637(a)(6)(A),(5)), respectively, including women.
- 7 (g) Economically Depressed Areas.—The Ad-
- 8 ministrator, in collaboration with the heads of other ap-
- 9 propriate Federal agencies, shall seek to ensure that enti-
- 10 ties eligible for assistance under a section referred to in
- 11 subsection (b)(2) and located in areas determined by the
- 12 Administrator to have a depressed economy, or a signifi-
- 13 cant concentration of defense-related industries, or chron-
- 14 ically high unemployment, are notified of the assistance
- 15 made available under that section and, to the extent prac-
- 16 ticable, to encourage and facilitate the participation of
- 17 such entities in activities for which assistance is provided
- 18 under that section.
- 19 (h) LIMITATION ON CONSTRUCTION OF FACILI-
- 20 TIES.—The Administrator may not provide financial as-
- 21 sistance to an entity under this section for the construc-
- 22 tion of facilities.
- 23 (i) Management.—The Administrator shall pre-
- 24 scribe any regulations necessary to carry out each section
- 25 referred to in subsection (b)(2), including regulations—

- 1 (1) prescribing the form, time, and manner in 2 which proposals for financial assistance under such 3 section shall submitted; and
- 4 (2) providing consideration of in-kind contribu5 tions by a non-Federal Government entity participat6 ing in a program or activity conducted under such
  7 section for the purpose of determining the share of
  8 the costs of participating in the program or activity
  9 that have been or are being undertaken by that en10 tity.

## 11 SEC. 212. INNOVATIVE ENVIRONMENTAL TECHNOLOGY

- PROGRAM.
- 13 (a) ESTABLISHMENT.—The Administrator, in col-
- 14 laboration with the heads of other appropriate Federal
- 15 agencies (including the Secretary of Commerce, the Sec-
- 16 retary of Energy, and the Secretary of Defense), shall con-
- 17 duct an interagency innovative environmental technology
- 18 program to develop or demonstrate advanced
- 19 precommercial environmental technologies and which, to
- 20 avoid redundancy and ensure efficiency, will be a part of,
- 21 and consistent with, the overall Federal environmental
- 22 strategy established in section 201.
- 23 (b) Eligibility for Financial Assistance.—An
- 24 entity shall be eligible for financial assistance to conduct
- 25 a demonstration or development project under the pro-

- 1 gram established under subsection (a) only if the entity2 is either a single United States company or a partnership
- 4 (1) includes two or more United States compa-5 nies; and
- 6 (2) may include, as determined appropriate by 7 the Administrator, a Federal laboratory or labora-8 tories, United States nonprofit organizations, United 9 States institutions of higher education, agencies of 10 States governments, and other entities that partici-11 pate in the partnership by supporting the activities 12 conducted by such companies or corporations under 13 this section.
- 14 (c) CRITERIA FOR SELECTION OF PROPOSALS.—The
  15 Administrator shall give priority consideration to the fol16 lowing criteria in evaluating proposals for financial assist17 ance under this section:
  - (1) Contribution to the priorities established pursuant to section 201(a)(2).
- 20 (2) Significant improvement in environmental soundness of the production process.
- (3) Contribution to industrial competitiveness,
   including new markets, reduced production costs,
   and enhanced global competitiveness.

which—

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1	(4) Improvement in the environment of the
2	workplace.
3	(5) Applicability to other industrial processes.
4	(6) Improvement in technological capability to
5	recycle complex combinations of materials.
6	(7) Innovative application of post-consumer ma-
7	terials.
8	(8) Direct application to environmental tech-
9	nologies needed for United States business and in-
10	dustry.
11	(9) Other criteria established by the Adminis-
12	trator.
13	(d) AWARD CONDITIONS.—Financial assistance pro-
14	vided under this section shall be subject to the following
15	conditions:
16	(1) Such assistance may be made for not more
17	than three years for single United States companies
18	and not more than five years for partnerships.
19	(2) Except as provided in paragraph (3), the
20	Federal Government may provide financial assist-
21	ance to a partnership under this section in an
22	amount that is not more than a minority share of

the cost of the project conducted by the partnership.

1	(3) The Federal share of the cost of a project
2	conducted by a partnership under this section may
3	exceed the limitation described in paragraph (2) if—
4	(A) the partnership is composed entirely of
5	small business concerns; or
6	(B) the Administrator determines that it
7	would be appropriate under the circumstances
8	and would serve the purpose of the program to
9	provide more than a minority cost-share of the
10	project conducted by the partnership.
11	(4) The Administrator has determined that—
12	(A) an applicant for any such assistance
13	has made reasonable efforts to obtain non-Fed-
14	eral funding for the Federal cost share sought
15	to be received under this section; and
16	(B) such non-Federal funding could not be
17	reasonably obtained.
18	(5) Each project under this section shall be car-
19	ried out under such terms and conditions as the Ad-
20	ministrator shall require to ensure the protection of
21	human health and the environment.
22	(e) EVALUATION.—As part of the annual evaluation
23	referred to in section 211(e), the Administrator shall con-
24	duct an evaluation of—

1	(1) the extent to which technologies developed
2	pursuant to the program established under sub-
3	section (a) are used;
4	(2) the contribution of such technologies to re-
5	duced pollution and the more efficient use of energy
6	and materials; and
7	(3) the contribution of such technologies to eco-
8	nomic development.
9	(f) Recoupment.—
10	(1) In general.—Not later than 180 days
11	after the date of the enactment of this Act, the Ad-
12	ministrator shall establish procedures and criteria
13	for recoupment in connection with any project, for
14	which financial assistance is provided under this sec-
15	tion, which has led to the development of a product
16	or process which is marketed or used.
17	(2) REQUIREMENT AS CONDITION FOR
18	AWARD.—
19	(A) IN GENERAL.—Except as provided in
20	subparagraph (B), such recoupment shall be re-
21	quired as a condition for the provision of finan-
22	cial assistance under this section, shall be pro-
23	portional to the Federal share of the cost of the

project, and shall be derived from the proceeds

1	of royalties or licensing fees received in connec-
2	tion with such product or process.
3	(B) EXCEPTION.—In the case of a product
4	or process which is used by the recipient of fi-
5	nancial assistance under this section for the
6	production and sale of its own products or proc-
7	esses, the recoupment shall consist of a pay-
8	ment equivalent to the payment which would be
9	made under subparagraph (A).
10	(3) WAIVER.—The Administrator may at any
11	time waive or defer all or some of the recoupment
12	requirements of this subsection as necessary, de-
13	pending on—
14	(A) the commercial competitiveness of the
15	entity or entities developing or using the prod-
16	uct or process;
17	(B) the profitability of the project; and
18	(C) the commercial viability of the product
19	or process used.
20	SEC. 213. PRESIDENT'S TOTAL ENVIRONMENTAL QUALITY
21	AWARD AND THE NATIONAL ENVIRON-
22	MENTALLY SOUND TECHNOLOGY AWARD.
23	(a) FINDINGS.—The Congress finds the following:
24	(1) Award programs such as the Malcolm
25	Baldrige National Quality Award Program have

- made substantial contributions to private enterprise by providing a framework upon which organizations can improve their operations and by focusing on issues important to their competitiveness.
  - (2) A President's Total Environmental Quality Award Program modeled on the Malcolm Baldrige National Quality Award Program would contribute to environmental quality and sustainable economic development by—
    - (A) helping to stimulate United States companies to research, develop, and demonstrate environmental technologies;
    - (B) recognizing the achievements of such companies which successfully research, develop, and demonstrate environmental technologies; and
    - (C) establishing guidelines and criteria that can be used by business, industrial, governmental, and other organizations in evaluating their own research, development, and demonstration of environmental technologies.
- (b) Purpose.—It is the purpose of this section to provide for the establishment and conduct of a President's Total Environmental Quality Award Program and a National Environmentally Sound Technology Award Pro-

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- 1 gram under which awards are given to recognize the suc-
- 2 cessful research, development, and demonstration of envi-
- 3 ronmental technologies, and information is disseminated
- 4 about such success.
- 5 (c) Establishment of Awards.—The Stevenson-
- 6 Wydler Technology Innovation Act of 1980 (15 U.S.C.
- 7 3701 et seq.) is amended by inserting after section 23 the
- 8 following new sections:
- 9 "SEC. 24. PRESIDENT'S TOTAL ENVIRONMENTAL QUALITY
- 10 AWARD.
- 11 "(a) ESTABLISHMENT.—There is hereby established
- 12 the President's Total Environmental Quality Award (in
- 13 this section referred to as the 'Award').
- 14 "(b) DESIGN.—The Award shall be evidenced by a
- 15 medal bearing the inscription 'President's Total Environ-
- 16 mental Quality Award'.
- 17 "(c) Award Selection Process.—The Secretary,
- 18 in collaboration with the Secretary of Energy, the Admin-
- 19 istrator of the Environmental Protection Agency, and the
- 20 Secretary of Defense, shall establish a process for the ac-
- 21 ceptance and evaluation of Award applicants. The Sec-
- 22 retary shall, to the extent practicable, refer to the proce-
- 23 dures used in the administration of the Malcolm Baldrige
- 24 National Quality Award, including the definition of award
- 25 categories, the delegation of responsibilities, and provi-

- 1 sions for publicity, evaluation feed-back, and information
- 2 transfer, as a model for the President's Total Environ-
- 3 mental Quality Award.

- 4 "(d) Presentation of Award.—
- 5 "(1) RECOMMENDATIONS BY SECRETARY.—The 6 Secretary shall submit to the President, and make 7 available to the public, the recommendations of the 8 Secretary for the selection of Award applicants.
  - "(2) SELECTION BY THE PRESIDENT.—On the basis of recommendations received under paragraph (1), the President shall periodically select for receipt of the Award United States companies and other organizations which in the judgment of the President have substantially benefited the environmental, economic, and social well-being of the United States through the research, development, and demonstration of environmental technologies and the effective integration of environmental concerns into its operations and management, and which as a consequence are deserving of special recognition.
    - "(3) Presentation ceremony.—The President or the Vice President shall present the Award to recipients selected under paragraph (2) with such ceremony as the President or the Vice President considers to be appropriate.

1	"(e) Limitation.—The information gathered in eval-
2	uating Award applications may be used only for the eval-
3	uation of such applications and for publicity by winners
4	of the Award. Such information may not be used for regu-
5	latory or compliance purposes.
6	"(f) Evaluation Criteria.—Criteria for evaluating
7	Award applications shall include the following:
8	"(1) The effectiveness of the organization's de-
9	velopment and demonstration of environmental tech-
10	nologies, as well as the organization's provision for
11	environmental technologies in its future plans.
12	"(2) The effectiveness of the integration of en-
13	vironmental concerns into the operations and man-
14	agement of the organization.
15	"(3) The effectiveness of energy and materials
16	use from the perspective of the life-cycle of the pro-
17	duction, use, recycle, and disposal of a product.
18	"(4) The effective use of an integrated ap-
19	proach to pollution prevention and control that con-
20	siders all environmental media (liquid, solid, gase-
21	ous).
22	"(5) The overall environmental performance of
23	the organization, including environmental compli-

ance.

- 1 "(g) FUNDING.—The Secretary may seek and accept
- 2 gifts from public and private sources (and may, subject
- 3 to annual appropriations, use such gifts) to carry out this
- 4 section. The Secretary shall annually make available to the
- 5 public a list of any such gifts and the sources of the gifts.
- 6 The Secretary may provide for the imposition of a fee
- 7 upon the organizations applying for the Award.
- 8 "(h) Report.—Not later than 3 years after the date
- 9 of the enactment of the Environmental Technologies Act
- 10 of 1994 and biennially thereafter, the Secretary shall sub-
- 11 mit to the President and the Congress a report on the
- 12 progress made in carrying out this section, including a re-
- 13 port on any indications that the Award has influenced the
- 14 practices of United States companies and other organiza-
- 15 tions. The report shall include any recommendations of
- 16 the Secretary for any modifications of the Award the Sec-
- 17 retary considers necessary.
- 18 "SEC. 25. NATIONAL ENVIRONMENTALLY SOUND TECH-
- 19 **NOLOGY AWARD.**
- 20 "(a) ESTABLISHMENT.—There is established a Na-
- 21 tional Environmentally Sound Technology Award for the
- 22 purpose of awarding individuals who have pioneered the
- 23 development and use of highly innovative environmental
- 24 technologies within the meaning of section 104(3) of the
- 25 Environmental Technologies Act of 1994.

- 1 "(b) Administration.—Using the authority and
- 2 procedures established in section 24 and subject to the
- 3 conditions described in this section, the Secretary, in col-
- 4 laboration with the Administrator of the Environmental
- 5 Protection Agency and the Secretary of Energy, shall re-
- 6 ceive and evaluate applications for the National Environ-
- 7 mentally Sound Technology Award and provide for presen-
- 8 tation of such Award.
- 9 "(c) QUALIFIED TECHNOLOGIES.—Technologies that
- 10 qualify for such Award may include the following:
- 11 "(1) Manufacturing technologies.
- 12 "(2) Industrial or consumer products.
- 13 "(3) Consumer services.
- 14 "(4) Recycling technologies.
- 15 "(5) Pollution monitoring and control tech-
- 16 nologies.
- 17 "(6) Pollution remediation technologies.
- 18 "(7) Other technologies as appropriate.
- 19 "(d) QUALIFIED APPLICANTS.—Any citizen or per-
- 20 manent resident of the United States may qualify for such
- 21 Award. Any such individual who is employed by or other-
- 22 wise works for a business, Federal laboratory, or other or-
- 23 ganization may qualify for such Award only if the individ-
- 24 ual was substantially involved in the invention or innova-
- 25 tion for which such Award is presented.

- 1 "(e) Limitation.—Not more than five such Awards
- 2 may be presented annually.
- 3 "(f) Report.—Not later than 2 years after the date
- 4 of the enactment of the Environmental Technologies Act
- 5 of 1994 and biennially thereafter, the Secretary shall sub-
- 6 mit to the Congress a report on the progress made in car-
- 7 rying out this section. The report shall contain an evalua-
- 8 tion of the performance of such Award, including an as-
- 9 sessment of the extent to which the public recognizes such
- 10 Award and such Award encourages innovation of environ-
- 11 mental technologies.".
- 12 SEC. 214. INCORPORATION OF INFORMATION ON ENVIRON-
- 13 MENTAL TECHNOLOGIES INTO EXISTING
- 14 **NETWORKS**.
- 15 (a) IN GENERAL.—Not later than one year after the
- 16 date of the enactment of this Act, the Administrator,
- 17 through the Office of Research and Development of the
- 18 Environmental Protection Agency and in collaboration
- 19 with the Under Secretary for Technology of the Depart-
- 20 ment of Commerce and the heads of any other appropriate
- 21 Federal agencies, shall, to the maximum extent prac-
- 22 ticable, use existing information network capabilities of
- 23 the Federal Government as part of, and consistent with,
- 24 the overall Federal environmental technology strategy es-
- 25 tablished in section 201 to provide coordinated access to

1	data on environmental technologies or protocols developed
2	tested, verified, or certified under programs established by
3	this Act, and by other appropriate Federal and non-Fed-
4	eral sources. Such data shall include—
5	(1) information on—
6	(A) activities carried out under this Act
7	and the amendments made by this Act;
8	(B) performance standards regarding envi-
9	ronmental technologies;
10	(C) significant international developments
11	in environmental technologies, fully coordinat-
12	ing with other international technology informa-
13	tion programs of the Federal Government; and
14	(D) cost-effectiveness and performance of
15	environmental technologies; and
16	(2) other information determined by the Admin-
17	istrator to be of substantial value in promoting the
18	research, development, and demonstration of envi-
19	ronmental technologies.
20	(b) Use of Existing Resources.—In carrying out
21	this section, the Administrator shall, to the maximum ex-
22	tent practicable—
23	(1) use existing public and private sector infor-
24	mation providers and carriers, and

- 1 (2) coordinate with the heads of other appro-
- 2 priate Federal agencies to make data described in
- 3 subsection (a) accessible through appropriate
- 4 database systems of those Federal agencies.
- 5 (c) OUTREACH.—The Administrator, through the Of-
- 6 fice of Research and Development of the Environmental
- 7 Protection Agency and in collaboration with the Under
- 8 Secretary for Technology of the Department of Commerce
- 9 and the heads of any other appropriate Federal agencies,
- 10 shall conduct outreach efforts to advertise, deliver, and
- 11 disseminate the information made available pursuant to
- 12 subsection (a). As part of such efforts, the Administrator
- 13 shall consult with United States industrial associations
- 14 and take appropriate action to ensure access to such infor-
- 15 mation by industrial assistance organizations and pro-
- 16 grams supported by a State or local government, a non-
- 17 profit organization in which a State or local government
- 18 is a member, an institution of higher education designated
- 19 by a State or local government, a manufacturing extension
- 20 and outreach service or regional technical assistance serv-
- 21 ice approved by the Federal Government, or a Federal lab-
- 22 oratory.
- 23 (d) EVALUATION AND REPORT.—As part of the an-
- 24 nual evaluation referred to in section 211(e), the Adminis-

1	trator shall conduct an evaluation of the extent to which
2	the data provided pursuant to this section are used.
3	SEC. 215. USE OF FEDERAL FACILITIES FOR ENVIRON-
4	MENTAL TECHNOLOGY DEMONSTRATION.
5	(a) ESTABLISHMENT.—The Administrator shall es-
6	tablish a program, in collaboration with the heads of ap-
7	propriate Federal agencies (including the Secretary of En-
8	ergy, the Secretary of Commerce, and the Secretary of De-
9	fense) as part of, and consistent with, the overall Federal
10	environmental technology strategy established in section
11	201, to demonstrate the performance of environmental
12	technologies at Federal laboratories and other Federal fa-
13	cilities.
14	(b) Qualifying Technology Demonstration
15	PROJECTS.—Technologies that qualify for demonstration
16	under such program include—
17	(1) environmental technologies that can be ap-
18	plied to a major pollution control or remediation
19	need at a Federal laboratory or other Federal facil-
20	ity;
21	(2) environmental technologies the development
22	of which would be significantly advanced by unique
23	facilities or capabilities of a Federal laboratory or
24	other Federal facility; and

1	(3) other environmental technologies that have
2	significant potential as an environmental technology
3	that will contribute to sustainable economic develop-
4	ment or that will make a significant contribution to
5	the cleanup of communities significantly affected by
6	pollution.
7	(c) Administration.—As part of the program estab-
8	lished under this section, the Administrator—
9	(1) may enter into a cooperative agreement
10	with any other Federal agency to make available, as
11	appropriate, any expertise, site, or facility under the
12	jurisdiction of such agency to an eligible entity
13	under subsection (d) for the purpose of demonstrat-
14	ing the performance of an environmental technology;
15	(2) shall establish application procedures for an
16	eligible entity under subsection (d) to apply to dem-
17	onstrate an environmental technology at an available
18	site or facility, including—
19	(A) provisions for sharing the cost of dem-
20	onstrating the technology with an applicant
21	that limit the Federal share of the cost to not
22	more than 50 percent of the total cost of dem-
23	onstrating the technology; and
24	(B) provisions that provide special consid-
25	eration of the needs of small business concerns;

1	(3) shall establish criteria for verification of the
2	efficacy of demonstrated environmental technologies
3	(4) shall establish specific procedures for the
4	management and oversight of demonstration activi-
5	ties conducted under this section;
6	(5) shall, pursuant to section 214, in consulta-
7	tion and collaboration with other Federal agencies
8	and consistent with the Federal environmental tech-
9	nology strategy established in section 201, make
10	available for entities eligible under subsection (d) in-
11	formation regarding—
12	(A) the facilities and expertise available at
13	Federal laboratories that would be valuable to
14	the demonstration of environmental tech-
15	nologies; and
16	(B) sites at Federal laboratories or other
17	Federal facilities potentially available for dem-
18	onstrating environmental technologies, charac-
19	terized by specific site characteristics, including
20	site geology and site contaminants where appro-
21	priate;
22	(6) shall document the performance and cost
23	characteristics of each environmental technology

demonstrated pursuant to this section; and

1	(7) shall list and disseminate, pursuant to sec-
2	tion 214, nonproprietary information regarding the
3	performance and cost characteristics of the environ-
4	mental technologies demonstrated pursuant to this
5	section.
6	(d) Entities Eligible for Participation.—Enti-
7	ties eligible to carry out a demonstration project as part
8	of the program established under subsection (a) are Unit-
9	ed States companies (including small business concerns),
10	United States nonprofit organizations, United States in-
11	stitutions of higher education, and other entities that the
12	Administrator considers appropriate.
13	(e) Program Evaluation and Reporting.—In the
14	report required by section 211(e), the Administrator shall
15	evaluate the performance of the program established
16	under this section, including an evaluation and statement
17	of—
18	(1) the number of environmental technologies
19	demonstrated and the type of problems addressed;
20	(2) the Federal and non-Federal financial re-
21	sources committed to the program; and
22	(3) the extent to which technologies dem-
23	onstrated pursuant to this section are used.
24	(f) Savings Provision.—Nothing in this section
25	shall be construed to supersede any other provision of law

- 1 that provides authority to a Federal agency to dem-
- 2 onstrate environmental technologies. Technologies eligible
- 3 for demonstration under this section that are also eligible
- 4 for demonstration at sites under section 311(b) of the
- 5 Comprehensive Environmental Response, Compensation,
- 6 and Liability Act of 1980 (42 U.S.C. 9660(b)) shall be
- 7 subject to the limitations and requirements of that section.
- 8 Demonstration projects and activities under this section
- 9 shall not alter or interfere with the conduct or expeditious
- 10 completion of response actions at facilities proposed for
- 11 or listed on the National Priorities List.
- 12 SEC. 216. STUDY OF FACTORS AFFECTING INNOVATION IN
- 13 ENVIRONMENTAL TECHNOLOGIES.
- 14 (a) STUDY.—The Administrator shall enter into an
- 15 agreement with the National Research Council to conduct
- 16 a study of the influences on technological innovation in
- 17 environmental technologies of economic, governmental,
- 18 competitive, financial, and other incentives and barriers.
- 19 (b) Report.—The Administrator shall include in the
- 20 agreement referred to in subsection (a) a requirement that
- 21 the National Research Council complete a report describ-
- 22 ing the results of the study referred to in such subsection
- 23 not later than two years after the date of the enactment
- 24 of this Act. The report shall identify specific incentives
- 25 for and barriers to technological innovation and describe

- 1 the reasons for the positive or negative influences identi-
- 2 fied. The Administrator shall submit the report to the
- 3 Congress within 30 days after receiving the report from
- 4 the National Research Council. Nothing in this section
- 5 may be construed as authorizing the reprogramming of
- 6 funds for such an agreement.

#### 7 SEC. 217. DISCLAIMER.

- 8 Nothing in this Act, or the amendments made by this
- 9 Act, shall be construed by the Administrator or the Sec-
- 10 retary of Energy, or any officer or employee of the Envi-
- 11 ronmental Protection Agency or the Department of En-
- 12 ergy, or by any court as altering, affecting, supplanting,
- 13 modifying, or changing, directly or indirectly, any law
- 14 which on the day before the date of the enactment of this
- 15 Act referred to, and provided authorities or responsibilities
- 16 for, or was administered by, the Environmental Protection
- 17 Agency or the Department of Energy or the Administrator
- 18 of the Environmental Protection Agency or the Secretary
- 19 of Energy.

## 20 Subtitle C—Other Research

## 21 Activities

- 22 SEC. 221. ENVIRONMENTALLY ADVANCED ENGINEERING
- 23 **RESEARCH.**
- 24 (a) IN GENERAL.—The Director of the National
- 25 Science Foundation shall take appropriate actions to sup-

- 1 port research activities that will advance the integration
- 2 of engineering practices and environmental protection in
- 3 the development of advanced technologies.
- 4 (b) Interagency Collaboration.—The Director
- 5 of the National Science Foundation shall collaborate with
- 6 the heads of other appropriate Federal agencies, including
- 7 the Administrator, in carrying out this section.
- 8 (c) Integration of Information.—The Director
- 9 of the National Science Foundation shall, to the maximum
- 10 extent practicable, provide for the dissemination of infor-
- 11 mation developed as a result of the research activities re-
- 12 ferred to in subsection (a) through education activities of
- 13 the Foundation and through the information dissemina-
- 14 tion activities developed pursuant to section 214.

## 15 TITLE III—PERFORMANCE

## 16 **MEASUREMENTS**

- 17 SEC. 301. PERFORMANCE MEASUREMENTS.
- 18 (a) AUTHORIZATION.—The Secretary of Commerce,
- 19 through the Director of the National Institute of Stand-
- 20 ards and Technology, in collaboration with the Adminis-
- 21 trator and the heads of other appropriate Federal agen-
- 22 cies, in consultation with non-Federal standards organiza-
- 23 tions, and as part of, and consistent with, the overall Fed-
- 24 eral environmental technology strategy established in sec-

- 1 tion 201, shall establish a program to support the clari-
- 2 fication of measurements of performance—
- 3 (1) for environmental technologies (not includ-
- ing technologies primarily intended to improve the
- 5 quality of the environment through pollution control,
- 6 pollution remediation, pollution monitoring, and dis-
- 7 posal), to clarify performance and substitutability
- 8 for conventional technologies and for the fair evalua-
- 9 tion of performance claims regarding such environ-
- mental technologies; and
- 11 (2) to develop appropriate standard reference
- materials required to implement paragraph (1).
- 13 (b) Existing Non-Federal Programs.—In devel-
- 14 oping the program established in subsection (a), the Direc-
- 15 tor of the National Institute of Standards and Technology
- 16 shall, to the maximum extent practicable, coordinate ef-
- 17 forts under such program with existing non-Federal stand-
- 18 ards activities that affect the environmental technologies
- 19 covered by subsection (a) (1).
- 20 (c) Coordination with Other Federal Agen-
- 21 CIES.—The Secretary of Commerce, through the Director
- 22 of the National Institute of Standards and Technology,
- 23 shall coordinate with the heads of other appropriate Fed-
- 24 eral agencies to ensure, to the maximum extent prac-
- 25 ticable, the use of the best available scientific and tech-

- 1 nical information in the evaluation of environmental per-
- 2 formance claims by such agencies.
- 3 (d) GLOSSARY OF TERMS.—The Secretary of Com-
- 4 merce, through the Director of the National Institute of
- 5 Standards and Technology, shall work with the heads of
- 6 appropriate Federal agencies and private-sector standards
- 7 organizations to facilitate the development and mainte-
- 8 nance of a glossary of standard definitions of terms used
- 9 in the evaluation of environmental performance claims.
- 10 (e) International Harmonization.—The Sec-
- 11 retary of Commerce, through the Director of the National
- 12 Institute of Standards and Technology, shall work with
- 13 domestic and international standards organizations to en-
- 14 sure harmonization of domestic performance measure-
- 15 ments with international performance measurements con-
- 16 sistent with applicable Federal and State laws.
- 17 SEC. 302. VERIFICATION OF ENVIRONMENTAL TECH-
- 18 **NOLOGIES.**
- 19 (a) Designation of Entities to Perform Envi-
- 20 RONMENTAL TECHNOLOGY VERIFICATION.—The Admin-
- 21 istrator may, in accordance with this section and as part
- 22 of, and consistent with, the overall Federal environmental
- 23 technology strategy developed in section 201, designate
- 24 entities to perform the functions described in paragraphs
- 25 (1) through (3) of subsection (b). The Administrator may

1	enter into joint agreements with Federal agencies, State
2	and local governments, and nonprofit, private-sector rep-
3	resentatives to support entities designated by the Adminis-
4	trator under this section.
5	(b) Functions.—Each entity designated under sub-
6	section (a)—
7	(1) shall verify, evaluate, and, to the maximum
8	extent practicable, certify the performance, cost-ef-
9	fectiveness, and ecological benefits of environmental
10	technologies;
11	(2) shall disseminate information on the charac-
12	teristics referred to in paragraph (1), including in-
13	formation that describes whether each environmental
14	technology evaluated and verified—
15	(A) meets the performance criteria of ap-
16	plicable law (including regulations issued by the
17	Administrator) under tested conditions at com-
18	parable or lower costs than other existing envi-
19	ronmental technologies; and
20	(B) constitutes a significant advance in the
21	development of environmental technologies with
22	broad applicability;
23	(3) shall submit to the Administrator data and
24	other information compiled by the entity with re-

- spect to each environmental technology verified and evaluated by the entity under this section; and (4) may use support provided under this section
- to develop technologies necessary for effective verification and evaluation under paragraph (1) and may charge appropriate fees for such verification and evaluation.
- 8 (c) Review by Administrator.—After receiving 9 data and other information from an entity designated 10 under subsection (a) with respect to an environmental 11 technology under subsection (b)(1), the Administrator 12 shall conduct appropriate review of the data, other information, and protocols developed by such entity with respect to such technology.
- 15 (d) Administration.—In carrying out this section, 16 the Administrator shall—
  - (1) by rule establish competitive procedures for soliciting applications for and selecting, pursuant to criteria referred to in subsection (e), entities to perform functions described in subsection (b) and, as appropriate, designate model entities;
  - (2) by rule establish eligibility criteria for entities to be designated under this section;
- 24 (3) in collaboration with the heads of other ap-25 propriate Federal agencies, including the Director of

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- the National Institute of Standards and Technology,
  certify, and as appropriate, develop common protocols to evaluate the cost and performance of environmental technologies;

  (4) make generally available through guidance
  - (4) make generally available through guidance manuals or other appropriate methods information regarding testing protocols for environmental technologies and establish a regular process for approving and updating such protocols;
  - (5) ensure that information regarding environmental technologies verified and evaluated under this program is disseminated pursuant to section 214;
  - (6) develop mechanisms to facilitate the verification of—
    - (A) environmental technologies developed or demonstrated by small business concerns, nonprofit organizations, and United States institutions of higher education; and
    - (B) environmental technologies that provide source reduction; and
  - (7) consult with the heads of other Federal agencies to make available, through cooperative agreements with the entities designated under this section, sources and expertise of Federal laboratories

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- for use by such entities in performing the functions
- described in subsection (b).
- 3 (e) SELECTION CRITERIA.—The Administrator, in
- 4 consultation with the heads of other Federal agencies,
- 5 State and local governments, and private sector organiza-
- 6 tions, shall select entities under this section based on the
- 7 following criteria:
- 8 (1) The capabilities of the applicant to provide
- 9 a thorough and credible technical and financial eval-
- 10 uation of environmental technologies.
- 11 (2) The clarity and efficiency of the proposed
- procedures for the receipt and review of applications
- for technology verification.
- 14 (3) The likelihood of the continued viability of
- the entity.
- 16 (4) The existence of a plan for disseminating
- 17 nonproprietary information regarding technologies
- verified by the entity.
- 19 (5) Other criteria that the Administrator con-
- siders appropriate.
- 21 (f) Merit-Based Selection Process.—Entities
- 22 supported under this section shall be selected only through
- 23 a merit-based selection process, established by the Admin-
- 24 istrator, pursuant to the criteria described in subsection
- 25 (e).

- 1 (g) AUTHORITY OF ADMINISTRATOR.—The Adminis-
- 2 trator may, consistent with applicable provisions of law
- 3 and this section, enter into cooperative agreements and
- 4 contracts to carry out this section.
- 5 (h) DIRECT VERIFICATION.—If the Administrator
- 6 determines that entities designated under this section can-
- 7 not adequately verify the performance of environmental
- 8 technologies because of scale or complexity, the Adminis-
- 9 trator may, consistent with applicable provisions of law
- 10 and this section, enter into direct agreements to verify the
- 11 performance of such technologies.
- 12 (i) Review.—

13 (1) IN GENERAL.—Any action by the Adminis-14 trator to verify or evaluate a technology (or to re-15 view a verification or evaluation) under this section 16 shall not constitute a final action by the Adminis-

trator and shall not be subject to judicial review.

18 (2) FAILURE TO COMPLY.—If a technology veri-19 fied, evaluated, or reviewed pursuant to this section 20 fails to comply with any applicable law (including regulations issued by the Administrator), the ver-21 22 ification, evaluation, or confirmation shall not constitute a defense in an enforcement action or suit 23 and shall not create a cause of action against the 24 Environmental Protection Agency. 25

- 1 (3) DISCLAIMER.—Nothing in this section may 2 be construed to authorize the Administrator to grant 3 a seal of approval of any kind for any entity or technology, to create any competitive advantage or dis-5 advantage for any entity, to authorize the Adminis-6 trator to require any person to install or use any 7 technology pursuant to any program administered by 8 the Environmental Protection Agency, or to des-9 ignate any technology as meeting a regulatory re-10 quirement.
- 11 (j) Report.—The Administrator, in consultation 12 with the heads of other appropriate Federal agencies, and 13 industry, nonprofit, and other appropriate organizations, 14 shall annually submit to the Congress a report that evalu-15 ates the implementation of this section. The report shall 16 include a description of the technologies verified pursuant 17 to this section, the number of the technologies verified, 18 and the extent of their use.

# 19 SEC. 303. USE OF CERTAIN ENVIRONMENTAL TECH20 NOLOGIES BY THE FEDERAL GOVERNMENT.

21 (a) ESTABLISHMENT.—In any program of the Presi-22 dent for evaluating, prioritizing, and approving the pur-23 chase by the Federal Government of environmental tech-24 nologies, the President shall, consistent with applicable 25 procurement laws, consider for such program any per-

1	formance measurements for environmental technologies as
2	may have been developed by the Secretary of Commerce
3	pursuant to section 301(a).
4	(b) REPORT.—Within one year after the date of the
5	enactment of this Act and annually thereafter, the Presi-
6	dent shall submit to the Congress a report describing the
7	progress made in carrying out this section and plans for
8	carrying out this section for the three years immediately
9	following the year in which the report is submitted.
10	TITLE IV—DEPARTMENT OF EN-
11	ERGY ENVIRONMENTAL
12	TECHNOLOGY DEVELOPMENT
13	SEC. 401. ENVIRONMENTAL RESTORATION AND WASTE
13 14	SEC. 401. ENVIRONMENTAL RESTORATION AND WASTE MANAGEMENT TECHNOLOGY DEVELOPMENT
14	MANAGEMENT TECHNOLOGY DEVELOPMENT
14 15	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title
14 15 16	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of
14 15 16 17	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—
14 15 16 17	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—  (1) new and improved technologies for environ-
114 115 116 117 118	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—  (1) new and improved technologies for environmental restoration and waste management (include
114 115 116 117 118 119 220	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—  (1) new and improved technologies for environmental restoration and waste management (including waste minimization);
14 15 16 17 18 19 20 21	MANAGEMENT TECHNOLOGY DEVELOPMENT  (a) PROGRAM.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—  (1) new and improved technologies for environmental restoration and waste management (including waste minimization);  (2) training for environmental technicians, engineering the secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—  (1) new and improved technologies for environmental restoration and waste management (including waste minimization);
14 15 16 17 18 19 20 21	(a) Program.—The Secretary of Energy (in this title referred to as the "Secretary") shall conduct programs of research, development, and demonstration on—  (1) new and improved technologies for environmental restoration and waste management (including waste minimization);  (2) training for environmental technicians, engineers, and scientists; and

- 1 In carrying out this section, the Secretary shall appro-
- 2 priately consider the strategic plan submitted under sec-
- 3 tion 201.
- 4 (b) IMPLEMENTATION AUTHORITY.—In implement-
- 5 ing this section, the Secretary may award grants to, and
- 6 enter into contracts, cooperative agreements, and other
- 7 appropriate arrangements with institutions of higher edu-
- 8 cation, industry, the National Laboratories, and other
- 9 Federal agencies.
- 10 (c) Coordination with Initiative.—The Sec-
- 1 retary shall ensure that the activities conducted pursuant
- 12 to this section are appropriately coordinated with the ac-
- 13 tivities conducted pursuant to the Environmental Tech-
- 14 nologies Innovation Initiative established under section
- 15 211.
- 16 (d) COORDINATION WITH CERTAIN OTHER ACTIVI-
- 17 TIES.—The Secretary shall coordinate activities under this
- 18 section with activities conducted by the Secretary of Labor
- 19 under the new technology program referred to in section
- 20 126(b)(9) of the Superfund Amendment and Reauthoriza-
- 21 tion Act of 1986 and by the hazardous substance research
- 22 development and demonstration centers established pursu-
- 23 ant to subsections (l) and (o) of section 118 of such Act.
- 24 Nothing in this section may be construed to affect the obli-

- 1 gation of the Secretary of Energy to comply with section
- 2 126 of such Act.

#### 3 SEC. 402. METALS RECYCLING DEMONSTRATION PROGRAM.

- 4 (a) ESTABLISHMENT.—The Secretary shall establish
- 5 a program to demonstrate the technological and economic
- 6 feasibility of recycling and reusing radioactively
- 7 uncontaminated and decontaminated metals and equip-
- 8 ment, and of other waste minimization techniques. Under
- 9 the program, the Secretary shall analyze the extent to
- 10 which sufficient private sector commitment to provide de-
- 11 contamination services and to purchase uncontaminated
- 12 and decontaminated metals and equipment either exists
- 13 or can be generated to support such a program of recy-
- 14 cling and reuse.
- 15 (b) Scope.—The demonstration program established
- 16 under subsection (a) shall provide for the recycling and
- 17 reuse of the metals and equipment at a minimum of 3
- 18 National Laboratories or former nuclear weapons produc-
- 19 tion facilities, and shall be of sufficient scope, and shall
- 20 include an appropriate variety of materials, to dem-
- 21 onstrate the feasibility of recycling and reusing radio-
- 22 actively uncontaminated and decontaminated metals and
- 23 equipment at all National Laboratories and former nu-
- 24 clear weapons production facilities. Such demonstration
- 25 program shall be carried out for a period of 3 years.

1	(c) Decontamination Technologies.—In the
2	course of carrying out the demonstration program, the
3	Secretary shall seek to promote the development of decon-
4	tamination technologies.
5	(d) Implementation Authority.—In implement-
6	ing this section, the Secretary may award grants to, and
7	enter into contracts, cooperative agreements, and other
8	appropriate arrangements with institutions of higher edu-
9	cation, industry, the National Laboratories, and other
10	Federal agencies.
11	(e) Waste Storage Containers.—As part of the
12	demonstration program, the Secretary shall seek to dem-
13	onstrate the technological and economic feasibility of using
14	only materials owned by the Department of Energy on the
15	date of enactment of this Act for containers to store or
16	dispose of radioactively contaminated metals and equip-
17	ment.
18	(f) Reports to Congress.—
19	(1) REQUIREMENT.—The Secretary shall—
20	(A) annually during the course of the dem-
21	onstration program established under this sec-
22	tion, report to the Congress on the progress
23	made in the previous year under such program;
24	and

1	(B) within 6 months after the completion
2	of such demonstration program, transmit a
3	final report to the Congress on the results of
4	the program.
5	(2) Contents of final report.—The report
6	required under paragraph (1)(B) shall include—
7	(A) the findings of the Secretary on the
8	success of the demonstration program at
9	achieving its purposes under this section;
10	(B) a comparison of recycling and reusing
11	radioactively contaminated metals and equip-
12	ment with the alternative of containing and dis-
13	posing of such metals and equipment;
14	(C) the quantitative assessment described
15	in paragraph (3) of this subsection; and
16	(D) a proposal, including any recommenda-
17	tions for necessary legislation, for expanding
18	the demonstration program to cover radio-
19	actively uncontaminated and decontaminated
20	metals and equipment at all National Labora-
21	tories and former nuclear weapons production
22	facilities.
23	(3) QUANTITATIVE ASSESSMENT.—To enable
24	the Secretary to carry out paragraph (2)(D), the
25	Secretary shall develop a quantitative estimate of—

- 1 (A) all metals and equipment owned by the
  2 Department at the National Laboratories and
  3 former nuclear weapons production facilities
  4 that are not radioactively contaminated and
  5 that are suitable for resale or recycling;
  - (B) all metals and equipment owned by the Department at the National Laboratories and former nuclear weapons production facilities that have been radioactively contaminated but can be recycled or reused by the Department; and
  - (C) all metals and equipment owned by the Department at the National Laboratories and former nuclear weapons production facilities that have been radioactively contaminated but can be decontaminated and may be appropriate for sale to the public.
  - (4) Factors in comparison.—In making the comparison required under paragraph (2)(B), the Secretary shall consider the full life cycle costs of each alternative, including revenues or savings realized and the costs of treatment, containment, storage, disposal, monitoring, and replacement. Disposal costs shall be calculated on the basis of the costs of such disposal to commercial disposal companies.

#### SEC. 403. FUNDING AND AUTHORIZATION.

- 2 (a) Research and Development Funding.—The
- 3 Secretary shall incrementally increase the proportion of
- 4 the annual budget request for the Environmental Restora-
- 5 tion and Waste Management program that is attributable
- 6 to research and development until such proportion is at
- 7 least 10 percent, except that the Secretary shall ensure
- 8 that an increase under this subsection does not affect
- 9 other programs and activities of the Department of En-
- 10 ergy. This subsection shall apply to budget requests begin-
- 11 ning with the budget request for the 2nd fiscal year that
- 12 begins after the date of the enactment of this Act.
- 13 (b) AUTHORIZATION OF APPROPRIATIONS.—Of those
- 14 funds requested under subsection (a) and made available
- 15 for the Environmental Restoration and Waste Manage-
- 16 ment program that are attributable to research and devel-
- 17 opment, there are authorized to be appropriated—
- 18 (1) \$10,000,000 for fiscal year 1995; and
- 19 (2) \$11,500,000 for fiscal year 1996,
- 20 for nondefense research and development activities of the
- 21 Office of Technology Development, including the advanced
- 22 robotics program, for the development of safer, less expen-
- 23 sive, and more efficient environmental restoration and
- 24 waste management technologies.

#### SEC. 404. COORDINATION.

- 2 The Secretary shall, where appropriate, coordinate
- 3 the implementation of this title with the implementation
- 4 of sections 212 and 215 of this Act.

## 5 TITLE V—AUTHORIZATION OF

## 6 **APPROPRIATIONS**

#### 7 SEC. 501. AUTHORIZATION OF APPROPRIATIONS.

- 8 (a) IN GENERAL.—Except as provided in subsection
- 9 (b), there is hereby authorized to be appropriated for fiscal
- 10 years 1995 and 1996 such sums as may be necessary to
- 11 carry out this Act and the amendments made by this Act.
- 12 (b) Environmental Technologies Innovation
- 13 INITIATIVE.—There is hereby authorized to be appro-
- 14 priated to carry out the Environmental Technologies Inno-
- 15 vation Initiative established in subtitle B of title II the
- 16 following:
- 17 (1) For fiscal year 1995, \$80,000,000, of which
- \$500,000 is authorized to be appropriated for the
- 19 President's Total Environmental Quality Award es-
- tablished in section 213 for fiscal year 1995 and
- \$700,000 is authorized to be appropriated for the
- study referred to in section 216.
- 23 (2) For fiscal year 1996, \$120,000,000, of
- which \$1,500,000 is authorized to be appropriated
- for the President's Total Environmental Quality
- Award established in section 213.

#### 1 SEC. 502. LIMITATION ON APPROPRIATIONS.

2	Notwithstanding	any	other	provision	of	this	Act,	no

- 3 funds are authorized to be appropriated for any fiscal year
- 4 after fiscal year 1996 for carrying out the programs and
- 5 activities for which funds are authorized by this Act, or
- 6 the amendments made by this Act.

#### 7 SEC. 503. COMPETITION REQUIREMENT FOR AWARDS OF

- 8 FINANCIAL ASSISTANCE.
- 9 (a) Competition Requirement.—No financial as-
- 10 sistance (including a grant, a contract, or any other award
- 11 of financial assistance) may be provided under a section
- 12 of this Act for research, development, or demonstration
- 13 activities, or for the construction of research, development,
- 14 or precommercial demonstration facilities, unless a com-
- 15 petitive, merit-based evaluation process consistent with
- 16 such section is used to award the financial assistance.
- 17 (b) REQUIREMENT OF SPECIFIC MODIFICATION OF
- 18 Competition Provision.—
- 19 (1) IN GENERAL.—A provision of law may not
- be construed as modifying or superseding subsection
- 21 (a), or as requiring that financial assistance (includ-
- ing a grant, a contract, or any other type of finan-
- cial assistance) be awarded under a section of this
- Act in a manner inconsistent with subsection (a),
- 25 unless such provision of law—
- 26 (A) specifically refers to this section;

1	(B) specifically states that such provision
2	of law modifies or supersedes subsection (a);
3	and
4	(C) specifically identifies the person to be
5	awarded the financial assistance and states that
6	the financial assistance to be awarded pursuant
7	to such provision of law is being awarded in a
8	manner inconsistent with subsection (a).
9	(2) Notice and wait requirement.—No fi-
10	nancial assistance (including a grant, a contract, or
11	any other type of financial assistance) may be
12	awarded pursuant to a provision of law that requires
13	or authorizes the award of the financial assistance
14	under this Act in a manner inconsistent with sub-
15	section (a) until—
16	(A) the head of the Federal agency intend-
17	ing to award the financial assistance submits to
18	the Congress a written notice of the intent to
19	award the financial assistance; and
20	(B) 180 days has elapsed after the date on
21	which the notice is received by the Congress.

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